



July 22, 2020

VIA ELECTRONIC FILING

The Honorable Jocelyn Boyd
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive
Columbia, South Carolina 29210

RE: Dominion Energy South Carolina, Incorporated's Request for Approval
of an Expanded Portfolio of Demand Side Management Programs, and
a Modified Demand Side Management Rate Rider
Docket No. 2019-239-E

Dear Ms. Boyd:

By Order No. 2019-880, dated December 20, 2019, ("Order") in the above-referenced docket, the Public Service Commission of South Carolina ("Commission"), among other things, approved Dominion Energy South Carolina's ("DESC") proposed suite of demand side management programs for a period of five years. In so doing, the Commission also ordered DESC to "recalculate avoided costs and reevaluate the programs and measures approved in this proceeding in light of the avoided costs and avoided cost methodology approved in Docket No. 2019-184-E" and to "file with the Commission a report (the "Avoided Cost Report") setting out the resulting avoided costs results and the changes, if any, to its DSM programs resulting from their reevaluation within 120 days of a final order being issued in Docket No. 2019-184-E." See Order No. 2019-880, pp. 43-44.

By this letter, and in compliance with the Order, DESC hereby provides the Commission with its Avoided Cost Report. As set forth in the Avoided Cost Report, 25 measures that were previously not cost-effective are now cost-effective. Of these measures, 16 were already included in the program offerings previously approved by the Commission, and DESC has updated certain individual 5-year program plans and the DSM Portfolio Summary to include the remaining 9 measures. See Appendix B of the Avoided Cost Report.

DESC is providing a copy of this filing to the South Carolina Office of Regulatory Staff and the other parties.

If you have any questions, please advise.

Very truly yours,



Matthew W. Gissendanner

MWG/kms
Enclosure

cc: Jeffrey M. Nelson, Esquire
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Dominion Energy South Carolina:

Dominion Energy South Carolina: DSM Potential Study Avoided Cost Update

July 2020

Executive Summary

In June 2018, ICF was retained by Dominion Energy South Carolina, Inc. (DESC) to produce a 10-year potential study focused on both Energy Efficiency (EE) and Demand Response (DR) measures. Based on the results of the potential study, a five-year program plan was developed for the purposes of guiding the implementation of cost-effective energy efficiency programs. Dominion Energy South Carolina (“DESC”) presented *The Dominion Energy South Carolina: 2020–2029 Achievable DSM Potential and PY10–PY14 Program Plan* (“DSM Potential Study”) to the Public Service Commission of South Carolina (“Commission”) for review in Docket 2019-239-E and, based on the results of the Demand Side Management (DSM) Potential Study, requested that the Commission approve a suite of ten modified, expanded, and new DSM programs for a period of five years. By Order No. 2019-880, the Commission approved the proposed suite of programs.

In that same order, the Commission ordered DESC to recalculate avoided costs and reevaluate the approved DSM programs and measures as per the avoided cost and avoided cost methodology approved in Docket No. 2019-184-E. DESC is also ordered to file the “Avoided Cost Report” with the Commission with resulting avoided costs results and changes to its DSM programs. The details of this analysis are reported below. In summary, overall cost-effectiveness results for the DSM 5-year program plan increased as indicated in Table 1.

Table 1: Program Cost-Effectiveness Summary

Program	Original		Updated	
	TRC	UCT	TRC	UCT
Appliance Recycling	1.11	0.92	1.22	1.00
Heating & Cooling, Water Heating	1.02	1.46	1.17	1.81
Home Energy Check-up	1.00	0.83	1.23	0.89
Home Energy Reports	1.88	0.32	2.05	0.39
Neighborhood Energy Efficiency	5.90	2.12	6.07	2.30
EnergyWise Online Store	8.15	4.51	8.30	4.84
Multifamily	1.76	1.54	2.18	1.65
Residential Portfolio	1.84	1.16	2.16	1.48
EnergyWise for Your Business	1.84	2.16	1.96	2.45
Small Business Direct Install	1.91	1.82	2.16	2.10
Municipal LED Lighting	2.37	0.42	2.37	0.42
C&I Portfolio	1.89	1.87	2.04	1.94
Total Portfolio	1.88	1.64	2.07	1.77

The result of the sensitivity analysis indicates that 25 measures that were previously non cost-effective are now cost-effective and viable for inclusion in the portfolio. Of these 25 measures, 16 were already included in the 5-year program plan forecasts as they were iterations of measure bundles that were already included in the program offerings. The measure level results are presented in Table 2.

Table 2: Sector-wise Measure Level Result of the Sensitivity Analysis

Sector	Measure Name	Efficient Measure	Previous TRC	Updated TRC	Already Included in a Program?	Will it be Included in a Program?
Residential	Packaged A/C	SEER 15	0.817	1.038	No	Yes
Residential	Split ASHP	SEER 18	0.857	1.086	No	Yes
Residential	Packaged A/C	SEER 15	0.817	1.038	No	Yes
Residential	Split ASHP	SEER 18	0.857	1.086	No	Yes
Residential	Split A/C	Seer 15	0.918	1.168	Yes	Yes
Residential	Split A/C	Seer 16	0.807	1.025	Yes	Yes
Residential	Air Sealing	Air Sealing > 30% Leakage Reduction (Low Income)	0.968	1.088	Yes	Yes
Residential	Ceiling Insulation	R 38	0.928	1.168	Yes	Yes
Residential	Ceiling Insulation	R 38	0.879	1.119	Yes	Yes
Residential	Ceiling Insulation	R 49	0.939	1.137	Yes	Yes
Residential	Attic Encapsulation_R19	R-19	0.996	1.344	Yes	Yes
Residential	Attic Encapsulation_R38	R-38	0.864	1.069	Yes	Yes
Residential	Heat Pump Water Heater (0.23 UEF)(Heat Pump - Conditioned Space)	Heat Pump Water Heater (0.23 UEF)(Heat Pump - Conditioned Space)	0.944	1.031	Yes	Yes
Residential	Heat Pump Water Heater (0.23 UEF)(Unconditioned Space)	Heat Pump Water Heater (0.23 UEF)(Unconditioned Space)	0.947	1.019	Yes	Yes
Residential	Air Sealing	Air Sealing > 30% Leakage Reduction	0.968	1.088	Yes	Yes
Residential	Split A/C	Seer 15	0.918	1.168	Yes	Yes
Residential	Split A/C	Seer 16	0.807	1.025	Yes	Yes
Residential	Heat Pump Water Heater (0.23 UEF)(Heat Pump - Conditioned Space)	Heat Pump Water Heater (0.23 UEF)(Heat Pump - Conditioned Space)	0.944	1.031	Yes	Yes
Residential	Heat Pump Water Heater (0.23 UEF)(Unconditioned Space)	Heat Pump Water Heater (0.23 UEF)(Unconditioned Space)	0.947	1.019	Yes	Yes

Sector	Measure Name	Efficient Measure	Previous TRC	Updated TRC	Already Included in a Program?	Will it be Included in a Program?
Non-Residential	Occupancy Sensor: Ceiling/Wall Mount (Remote)		0.922	1.157	No	Yes
Non-Residential	Occupancy Sensor: Ceiling/Wall Mount (Remote)		0.788	1.012	No	Yes
Non-Residential	Heat Pump Storage Water Heater		0.932	1.015	No	Yes
Non-Residential	Air-Source Heat Pump, Tier 1; \geq 63.3 tons, greater than 10.2 SEER & 10.3 EER		0.958	1.202	Yes	Yes
Industrial	Optimized sizing of compressor system		0.987	1.066	No	Yes
Industrial	Premium efficiency ASD compressor		0.945	1.020	No	Yes

Measure Analysis

In total, ICF analyzed 454 measure types and 1,442 measure permutations for this report. Many measures required permutations for different applications, such as different building types, lamp wattages, efficiency levels, and decision types. For example, there are permutations of central air conditioners by seasonal energy efficiency ratio (SEER) level, subsector, and building type.

All measures were analyzed for cost-effectiveness using the measure TRC test.¹ In most cases, only measures with a TRC of 1.0 or higher (in their representative test years) passed to the next stage of the analysis. A measure with a TRC result of 1.0 indicates that the measure is cost-effective on a stand-alone basis (before consideration of program costs or net-to-gross (NTG) ratios). An exception to this rule for non-economic measure permutations was made when most of the permutations of that measure type were cost-effective. For example, if a measure type was cost-effective for a majority of, but not all, applicable building types, the measure type was included for all building types in the achievable potential analysis. Excluding participation by customers in a specific building type can be impractical in implementation. Because of this, many of the measures that were previously non-cost effective, were already included in the portfolio forecasts.

For more information about measure analysis and cost-effectiveness testing, please refer to *The Dominion Energy South Carolina: 2020–2029 Achievable DSM Potential and PY10–PY14 Program Plan*.

Avoided Costs Calculations

For the avoided capacity cost calculation, a resource plan populated with internal combustion turbines (ICT) is used. DESC calculates the incremental capital investment related revenue required to support the ICT resource plan. DESC derives a change case in its resource plan by adding a 100 MW purchase then adjusting the expansion plan accordingly. The difference in the revenue requirement between the base case and the change case defines the avoided capacity cost. For the purposes of this updated calculation, a value of \$93.02 per kW (in 2019 dollars), which is inclusive of transmission and distribution, was used along with the application of a 15% peak line-loss factor and a 14% reserve margin factor. The original DSM Potential Study calculation used a value of \$63.37 per kW (in 2019 dollars), which is inclusive of transmission and distribution, along with the application of a 15% peak line-loss factor and a 14% reserve margin factor.

For the avoided energy cost calculation, the base case is defined by DESC's existing fleet of generators plus any projected future generators, as well as the solar facilities with which DESC has executed a power purchase agreement. The change case is the same as the base case except that the hourly loads are reduced by a 100 MW EE profile. The avoided energy cost is simply the difference between the base case costs and the change case costs. For the purposes of this calculation and the original DSM Potential Study, a value of \$0.0358 per kWh (in 2019 dollars) was used, followed by the application of an 8% average line-loss factor.

¹ Measure TRC benefits include avoided energy costs, avoided capacity costs, and other non-electricity savings over the lifetime of the measure. Measure TRC costs are measure incremental costs; these include the difference in equipment and labor costs between the efficient and baseline units.

Conclusion

In summary, overall cost-effectiveness results for the DSM 5-year program plan increased for every program. The TRC of the total portfolio increased from original 1.88 to 2.07. The 5-year spending forecasts increased by less than 1% from \$139.8 million to \$140.8 million and energy savings forecast increased by 0.25% from 498,971 MWh to 500,220 MWh. Overall, the 5-year DSM portfolio impacts are summarized in Table 3 .

Table 3: 5-year DSM portfolio impact summary

	Original	Updated
Portfolio Level TRC	1.88	2.07
Spending Forecast	\$139.8 million	\$140.8 million
MWh Savings Forecast	498,971 MWh	500,220 MWh
MW Savings Forecast	115.5	116.6 MW

Additionally, one residential and one C&I program have updated 5-year program forecasts, and as a result, new measures are now included in the savings and spending forecasts. The result of the sensitivity analysis indicates that 25 measures that were previously non cost-effective are now cost-effective and viable for inclusion in the portfolio. Of these 25 measures, 16 were already included in the 5-year program plan forecasts as they were iterations and alterations of measure bundles that were already included in the program offerings. Remaining new 9 cost-effective measures are included “Heating and Cooling” program and “EnergyWise for Your Business” program.

The measure level results are presented in Appendix A. The individual 5-year program plans and DSM Portfolio Summary has been updated and presented in Appendix B.

Appendix A – Measure Level Detail

Sector	Subsector /Program	Measure Type	Measure class	End-Use	Efficient Measure Name	Efficient Measure	Previous TRC	Updated TRC	Already Included in a Program?	Will it be Included in a Program?
Residential	Heating & Cooling	AC	All	HVAC	Packaged A/C	SEER 15	0.817	1.038	No	Yes
Residential	Heating & Cooling	Heat Pump	All	HVAC	Split ASHP	SEER 18	0.857	1.086	No	Yes
Residential	Heating & Cooling	AC	All	HVAC	Packaged A/C	SEER 15	0.817	1.038	No	Yes
Residential	Heating & Cooling	Heat Pump	All	HVAC	Split ASHP	SEER 18	0.857	1.086	No	Yes
Residential	Heating & Cooling	AC	All	HVAC	Split A/C	Seer 15	0.918	1.168	Yes	Yes
Residential	Heating & Cooling	AC	All	HVAC	Split A/C	Seer 16	0.807	1.025	Yes	Yes
Residential	Low Income Mobile	All	All	Shell	Air Sealing	Air Sealing > 30% Leakage Reduction (Low Income)	0.968	1.088	Yes	Yes
Residential	Heating & Cooling	AC/Gas Heat	All	Shell	Ceiling Insulation	R 38	0.928	1.168	Yes	Yes
Residential	Heating & Cooling	Heat Pump	All	Shell	Ceiling Insulation	R 38	0.879	1.119	Yes	Yes
Residential	Heating & Cooling	AC/Electric Resistance Heat	All	Shell	Ceiling Insulation	R 49	0.939	1.137	Yes	Yes
Residential	Heating & Cooling	AC/Gas Heat	All	Shell	Attic Encapsulation_R19	R-19	0.996	1.344	Yes	Yes
Residential	Heating & Cooling	Heat Pump	All	Shell	Attic Encapsulation_R38	R-38	0.864	1.069	Yes	Yes
Residential	Heating & Cooling	Heat Pump	All	Hot Water	Heat Pump Water Heater (0.23 UEF) (Heat Pump - Conditioned Space)	Heat Pump Water Heater (0.23 UEF) (Heat Pump - Conditioned Space)	0.944	1.031	Yes	Yes
Residential	Heating & Cooling	All	All	Hot Water	Heat Pump Water Heater (0.23 UEF) (Unconditioned Space)	Heat Pump Water Heater (0.23 UEF) (Unconditioned Space)	0.947	1.019	Yes	Yes
Residential	Heating & Cooling	All	All	Shell	Air Sealing	Air Sealing > 30% Leakage Reduction	0.968	1.088	Yes	Yes
Residential	Multifamily	AC	All	HVAC	Split A/C	Seer 15	0.918	1.168	Yes	Yes
Residential	Multifamily	AC	All	HVAC	Split A/C	Seer 16	0.807	1.025	Yes	Yes
Residential	Multifamily	Heat Pump	All	Hot Water	Heat Pump Water Heater (0.23 UEF) (Heat Pump - Conditioned Space)	Heat Pump Water Heater (0.23 UEF) (Heat Pump - Conditioned Space)	0.944	1.031	Yes	Yes

Sector	Subsector /Program	Measure Type	Measure class	End-Use	Efficient Measure Name	Efficient Measure	Previous TRC	Updated TRC	Already Included in a Program?	Will it be Included in a Program?
Residential	Multifamily	All	All	Hot Water	Heat Pump Water Heater (0.23 UEF) (Unconditioned Space)	Heat Pump Water Heater (0.23 UEF) (Unconditioned Space)	0.947	1.019	Yes	Yes
Sector	Non-Residential Subsector	Measure Type	Measure class	End-Use	Efficient Measure Name	Efficient Measure	Previous TRC	Updated TRC	Already Included in a Program?	Will it be Included in a Program?
Non-Residential	Large Commercial	Grocery	Average Large Commercial	Lighting	Occupancy Sensor: Ceiling/Wall Mount (Remote)		0.922	1.157	No	Yes
Non-Residential	Large Commercial	Retail/Service	Average Large Commercial	Lighting	Occupancy Sensor: Ceiling/Wall Mount (Remote)		0.788	1.012	No	Yes
Non-Residential	All	All	Average Total	Service Hot Water	Heat Pump Storage Water Heater		0.932	1.015	No	Yes
Non-Residential	All	All	Average Total	HVAC	Air-Source Heat Pump, Tier 1; ≥ 63.3 tons, greater than 10.2 SEER & 10.3 EER		0.958	1.202	Yes	Yes
Industrial	Small Industrial	Industrial	Compressed Air	Custom	Optimized sizing of compressor system		0.987	1.066	No	Yes
Industrial	Pulp & paper	Industrial	Compressed Air	Custom	Premium efficiency ASD compressor		0.945	1.020	No	Yes

Appendix B

For many programs in the DSM Portfolio, the updated avoided cost values did not result in any changes to the 5-year forecasted savings and spend forecasts. The table below provides information about which individual programs saw savings and spend forecast changes, and which did not.

Residential Programs	Change (Yes/No)
Appliance Recycling	No
Heating & Cooling, Water Heating	Yes
Home Energy Check-up	No
Home Energy Reports	No
Neighborhood Energy Efficiency	No
EnergyWise Online Store	No
Multifamily	No
Commercial & Industrial Programs	Change (Yes/No)
EnergyWise for Your Business	Yes
Small Business Direct Install	No
Municipal LED Lighting	No

Program Tables

The following are all individual program tables with updates results where applicable. Note that the resulting TRC and UCT is impacted for all programs, even if savings and spends are not impacted.

Appliance Recycling	Year 10	Year 11	Year 12	Year 13	Year 14	Total
Net Annual MWh Savings	2,909	2,867	2,828	2,790	2,755	14,149
Net Annual MW Savings	0.35	0.35	0.34	0.34	0.33	1.72
Measures	4,383	4,316	4,253	4,192	4,135	21,279
Incentive Costs	\$499,643	\$492,049	\$484,811	\$477,917	\$471,353	\$2,425,774
Non-Incentive Costs	\$524,625	\$516,652	\$509,052	\$501,812	\$494,921	\$2,547,062
Total Program Costs	\$1,024,268	\$1,008,701	\$993,863	\$979,729	\$966,275	\$4,972,836
TRC Ratio	1.22					
UCT Ratio	1.00					
Net-to-Gross Ratio	0.60					

Heating, Cooling, & Water Heating	Year 10	Year 11	Year 12	Year 13	Year 14	Total
Net Annual MWh Savings	5,332	6,145	6,827	4,972	5,183	28,458
Net Annual MW Savings	3.44	3.58	3.71	1.87	1.91	14.52
Measures	5,791	6,222	6,610	5,339	5,489	29,451
Incentive Costs	\$2,514,419	\$2,726,946	\$2,916,221	\$2,131,375	\$2,199,237	\$12,488,198
Non-Incentive Costs	\$788,590	\$755,687	\$815,484	\$608,912	\$629,946	\$3,598,619
Total Program Costs	\$3,303,009	\$3,482,633	\$3,731,705	\$2,740,287	\$2,829,183	\$16,086,817
TRC Ratio	1.17					
UCT Ratio	1.81					
Net-to-Gross Ratio	0.76					

Home Energy Check-up	Year 10	Year 11	Year 12	Year 13	Year 14	Total
Net Annual MWh Savings	4,947	5,392	5,650	5,722	5,696	27,406
Net Annual MW Savings	0.85	1.12	1.29	1.38	1.42	6.06
Measures	1,232,185	1,816,224	2,211,173	2,418,244	2,521,653	10,199,478
Incentive Costs	\$1,448,512	\$1,718,321	\$1,890,997	\$1,967,062	\$1,990,699	\$9,015,591
Non-Incentive Costs	\$1,092,005	\$1,297,062	\$1,428,394	\$1,486,400	\$1,504,606	\$6,808,468
Total Program Costs	\$2,540,518	\$3,015,383	\$3,319,392	\$3,453,462	\$3,495,305	\$15,824,059
TRC Ratio	1.23					
UCT Ratio	0.89					
Net-to-Gross Ratio	0.80					

Home Energy Reports	Year 10	Year 11	Year 12	Year 13	Year 14	Total
Net Annual MWh Savings	2,606	2,641	2,676	8,205	8,345	24,473
Net Annual MW Savings	0.99	1.00	1.01	3.11	3.16	9.27
Measures	37,647	38,144	38,648	80,906	81,974	277,319
Incentive Costs	\$342,964	\$347,493	\$352,083	\$1,393,141	\$1,411,540	\$3,847,221
Non-Incentive Costs	\$121,600	\$123,206	\$124,833	\$261,325	\$264,777	\$895,740
Total Program Costs	\$464,564	\$470,699	\$476,916	\$1,654,466	\$1,676,317	\$4,742,962
TRC Ratio	2.05					
UCT Ratio	0.39					
Net-to-Gross Ratio	1.00					

Neighborhood Energy Efficiency	Year 10	Year 11	Year 12	Year 13	Year 14	Total
Net Annual MWh Savings	4,975	4,929	4,885	4,844	4,805	24,439
Net Annual MW Savings	0.56	0.56	0.56	0.55	0.55	2.78
Measures	106,902	106,762	106,661	106,598	106,572	533,494
Incentive Costs	\$760,387	\$752,887	\$745,765	\$739,012	\$732,619	\$3,730,671
Non-Incentive Costs	\$197,701	\$195,751	\$193,899	\$192,143	\$190,481	\$969,974
Total Program Costs	\$958,088	\$948,638	\$939,664	\$931,155	\$923,100	\$4,700,645
TRC Ratio	6.07					
UCT Ratio	2.30					
Net-to-Gross Ratio	1.00					

Online Store	Year 10	Year 11	Year 12	Year 13	Year 14	Total
Net Annual MWh Savings	5,439	6,000	6,503	895	962	19,799
Net Annual MW Savings	0.49	0.51	0.53	0.07	0.08	1.67
Measures	112,540	115,917	118,980	8,402	9,030	364,869
Incentive Costs	\$416,517	\$486,170	\$548,677	\$39,573	\$42,530	\$1,533,467
Non-Incentive Costs	\$96,302	\$110,268	\$122,807	\$7,915	\$8,506	\$345,799
Total Program Costs	\$512,819	\$596,439	\$671,484	\$47,488	\$51,036	\$1,879,266
TRC Ratio	8.30					
UCT Ratio	4.84					
Net-to-Gross Ratio	0.80					

Multifamily	Year 10	Year 11	Year 12	Year 13	Year 14	Total
Net Annual MWh Savings	2,641	3,984	3,992	3,999	4,010	18,627
Net Annual MW Savings	0.40	0.61	0.61	0.61	0.62	2.85
Measures	10,721	16,193	16,259	16,330	16,406	75,909
Incentive Costs	\$485,814	\$734,489	\$738,495	\$739,832	\$744,245	\$3,442,875
Non-Incentive Costs	\$344,326	\$293,796	\$295,398	\$295,933	\$297,698	\$1,527,150
Total Program Costs	\$830,140	\$1,028,284	\$1,033,893	\$1,035,765	\$1,041,943	\$4,970,025
TRC Ratio	2.18					
UCT Ratio	1.65					
Net-to-Gross Ratio	0.90					

EnergyWise for Your Business	Year 10	Year 11	Year 12	Year 13	Year 14	Total
Net Annual MWh Savings	37,083	45,764	54,292	56,607	58,512	252,258
Net Annual MW Savings	8.76	10.52	12.19	12.64	13.05	57.15
Measures	88,415	110,632	131,096	137,827	144,427	612,397
Incentive Costs	\$5,058,470	\$6,478,855	\$7,805,430	\$8,110,957	\$8,375,487	\$35,829,199
Non-Incentive Costs	\$2,977,197	\$3,236,881	\$4,367,729	\$4,004,502	\$4,096,720	\$18,683,028
Total Program Costs	\$8,035,667	\$9,715,736	\$12,173,159	\$12,115,459	\$12,472,207	\$54,512,228
TRC Ratio	1.96					
UCT Ratio	2.45					
Net-to-Gross Ratio	0.70					

Small Business Direct Install	Year 10	Year 11	Year 12	Year 13	Year 14	Total
Net Annual MWh Savings	8,718	12,840	15,546	16,900	17,537	71,541
Net Annual MW Savings	2.48	3.67	4.47	4.87	5.07	20.57
Measures	110,227	173,487	210,108	228,253	236,420	958,495
Incentive Costs	\$1,025,605	\$1,519,888	\$1,795,390	\$1,905,446	\$1,938,483	\$8,184,812
Non-Incentive Costs	\$615,363	\$911,933	\$1,077,234	\$1,143,267	\$1,163,090	\$4,910,887
Total Program Costs	\$1,640,968	\$2,431,821	\$2,872,624	\$3,048,713	\$3,101,573	\$13,095,699
TRC Ratio	2.16					
UCT Ratio	2.10					
Net-to-Gross Ratio	0.95					

Municipal LED Lighting	Year 10	Year 11	Year 12	Year 13	Year 14	Total
Net Annual MWh Savings	3,017	4,307	3,876	4,186	3,684	19,070
Net Annual MW Savings	0.00	0.00	0.00	0.00	0.00	0.00
Measures	3,499	5,065	4,558	4,923	4,332	22,377
Incentive Costs	\$2,342,663	\$3,384,309	\$3,045,878	\$3,289,549	\$2,894,803	\$14,957,202
Non-Incentive Costs	\$873,079	\$1,116,822	\$1,005,140	\$1,085,551	\$955,285	\$5,035,877
Total Program Costs	\$3,215,742	\$4,501,131	\$4,051,018	\$4,375,100	\$3,850,088	\$19,993,079
TRC Ratio	2.37					
UCT Ratio	0.42					
Net-to-Gross Ratio	1.00					

DSM Portfolio Summary

Program	TRC	Sum of Incremental for Program Years 10 – 14				
		Non-Incentive \$	Incentive \$	Total \$	MWh	MW
Appliance Recycling	1.22	\$2,547,062	\$2,425,774	\$4,972,836	14,149	1.72
H&C and Water Heating	1.17	\$3,598,619	\$12,488,198	\$16,086,817	28,458	14.52
Home Energy Check-up	1.23	\$6,808,468	\$9,015,591	\$15,824,059	27,406	6.06
Home Energy Reports	2.05	\$895,740	\$3,847,221	\$4,742,962	24,473	9.27
Neighborhood Energy Efficiency	6.07	\$969,974	\$3,730,671	\$4,700,645	24,439	2.78
Online Store	8.30	\$345,799	\$1,533,467	\$1,879,266	19,799	1.67
Multifamily	2.18	\$1,527,150	\$3,442,875	\$4,970,025	18,627	2.85
Residential Portfolio	2.16	\$16,692,813	\$36,483,796	\$53,176,609	157,351	38.87
EnergyWise for Your Business	1.96	\$18,683,028	\$35,829,199	\$54,512,228	252,258	57.15
Small Business Direct Install	2.16	\$4,910,887	\$8,184,812	\$13,095,699	71,541	20.57
Municipal LED Lighting	2.37	\$5,035,877	\$14,957,202	\$19,993,079	19,070	0.00
C&I Portfolio	2.04	\$28,629,792	\$58,971,214	\$87,601,006	342,869	77.72
Total Portfolio	2.07	\$45,322,605	\$95,455,010	\$140,777,615	500,220	116.6